

REMARKS

Reconsideration and further examination are requested in light of the above amendments and the following remarks.

Status of All of the Claims

Below is the status of the claims in this application.

1. Claim(s) pending: 1-11.
2. Claim(s) canceled: None.
3. Claim(s) added: 12-13.

Entry of the foregoing amendments to delete reference numerals is respectfully requested. No narrowing of any claim is intended or should be inferred. No new matter has been added.

Claim Rejections under 35 U.S.C. § 102

Claims 1-2, 4 and 6-11 were rejected under 35 USC 102(e) as allegedly anticipated by U.S. Patent No. 4,940,459 to Noce. Noce discloses an inflation device for a balloon catheter. The Examiner referred to column 4, lines 31-40 of Noce for the assertion that its device “includes at least one insert-molded component, wherein the at least one insert-molded component includes at least one of a threaded insert 28 providing the threaded region insert-molded into the handle and a threaded rod insert-molded into the knob.” (Office Action, p.2.)

Applicants respectfully traverse because Noce’s item 28 is not “a threaded insert providing the threaded region” that is *insert-molded into* the handle 22 as recited in claim 1. Item 28 is part of a trigger 30 that is pivotally mounted in the handle of the Noce device, such that item 28 may engage or disengage threaded shank 26 of plunger 24. (Noce, col. 3, ll. 45-51). When the trigger is depressed, item 28 pivots with respect to the handle to disengage from shank 26. Item 28 is not insert-molded into the handle, but necessarily pivots with respect to handle 22.

Moreover, it would not make sense to insert-mold item 28 of Noce into the Noce pistol-grip handle 22. It then would not be able to move with respect to the handle, and thus could not operate as intended to engage and disengage threaded shank 26.

Additionally, knob 46 of Noce is secured on the end of shaft 26 after assembly in the cap 64 (Noce, col. 4, ll. 42-43). Noce notes that plunger 24 may be insert molded by applying polymer around a metal center shaft (col. 4, ll. 31-38). However, the reference contains no mention of the threaded rod being insert-molded into the knob as claimed, and discloses attaching knob 46 after formation of plunger 24 and its insertion into cap 64. Thus, Noce does not disclose and anticipate either an insert-molded component that includes “a threaded insert providing the threaded region insert-molded into the handle” or “a threaded rod insert-molded into the knob” as recited in claim 1. Applicant, therefore, respectfully solicits the withdrawal of this rejection with respect to independent claim 1 and all claims depending therefrom.

Dependent claims 2-11 are not anticipated on their own merit and/or by virtue of their dependence from claim 1. For example, claim 2 recites that the threaded insert includes metal or plastic. The Examiner compared item 28 of Noce with the recited “threaded insert,” and cited to column 4, lines 31-40 of Noce to reject claim 2. However, that disclosure does not discuss item 28 of Noce at all, but describes the formation of plunger 24.

As another example, claim 6 recites that an exterior surface of a chamber (that receives a medicinal mixture, as claim 1 recites) has at least one notch dimensioned to engage with at least one corresponding tab on an exterior surface of a handle. The Examiner considered item 20 of Noce a “chamber” as recited, and item 22 a “handle.” Further, the Examiner considered an “opening created by 64” to be a notch, and item 26 to be a tab. Respectfully, it is not understood what opening the Examiner refers to. Central opening 66 does not engage with any part of grip

handle 22, as handle 22 does not enter opening 66. Opening 66 also is not a “notch” in an exterior surface, but is a circular hole through a surface. Similarly, there is no tab on handle 22 that engages opening 66. Item 26 in Noce is a threaded shank, not a part of handle 22.

With respect to claim 7, the Office Action referred to an item 16, but that number does not appear in Noce. It referred also to Noce’s Figure 2, but four exterior longitudinal sides are not seen in Figure 2. No explanation beyond references to item 16 and Figure 2 were given, and so respectfully it is submitted that no prima facie case of anticipation of claim 7 has been made.

Regarding claim 9, the Office Action referred only to Figure 2 of Noce to assert that a knob (identified as 20) has a longitudinal rectangular cavity. Noce calls its item 20 a “barrel,” and the Office Action considered it a chamber that receives a medicinal mixture in analyzing claim 1. It should not be considered in this context a “knob.”

Claim 11 recites that the threaded rod of claim 1 is coupled to a piston, and the piston is insert molded into the threaded rod. The Office Action called item 24 of Noce such a “piston.” Plunger 24 includes a threaded shank 26 (col. 3, ll. 45-46), and is “insert molded, i.e. is formed by molding a polymer . . . on a center shaft 68 formed from steel or other metal. The molded polymer forms the outer configuration, including the threads 70 and outer layer 72, of the plunger” (col. 4, lines 31-36). Noce identifies 74 as a piston portion with grooves 76 and O-rings 78 (col. 4, ll. 38-39). Insert molding is discussed with respect to forming threaded shank 26. Piston portion 74 is not the threaded shank, and there is no disclosure of it being insert molded into a threaded rod.

Claim Rejections under 35 U.S.C. § 103

Claim 5 was rejected as being allegedly obvious over Noce. As noted above, however, Noce does not disclose all features recited in independent claim 1. Further, the rejection is based

merely on alleged reversal of parts from claim 6, and as demonstrated previously Noce also does not disclose all features of claim 6. There is no “notch” shown in Noce that could be moved onto an exterior surface of the handle, because it does not make sense to move opening 66 (through which item 26 extends) to handle 22. The Office Action defined threaded shank 26 as a tab in analyzing claim 5, and similarly there is no basis to move those threads to the outside of barrel 20. Hence, Applicants respectfully request withdrawal of this rejection.

Claim 3 was rejected as being allegedly unpatentable over Noce in view of U.S. Patent No. 6,802,824 to Mickley et al. Again, because Noce does not disclose all of the features recited in independent claim 1 from which claim 3 depends, this rejection should be withdrawn. Further, while the Mickley reference discusses a “handpiece housing 2” that includes “a rubber grip surface 8,” it does not explicitly or inherently disclose overmolded soft rubber as in claim 3. For example, it is possible that rather than overmolding rubber, Mickley’s surface 8 is otherwise applied. Consequently, Applicants respectfully request withdrawal of this rejection.

New Claims

New claims 12 and 13 are being added. Claim 12 depends from allowable claim 1, and recites that the threaded rod includes an internal locking mechanism, and further including a piston having at least a portion snapped into that internal locking mechanism.. It is supported at least by paragraphs 51-68 and Figure 4 of the application. No new matter has been added. It is allowable over the Noce reference because Noce does not show or suggest an internal locking mechanism or a piston that snaps into it, as recited in claim 12.

Claim 13 depends on claim 1, and recites that the chamber includes an external locking mechanism having an orthogonal surface and a tab distal of that orthogonal surface. It is

supported at least by paragraph 75 and Figure 6 of the application. No new matter has been added. It is allowable over the Noce reference because Noce's barrel 20 was compared to the recited chamber, and Noce does not show or suggest an external locking mechanism that has an orthogonal surface on its barrel 20, nor a tab that is distal of such an orthogonal surface, as recited in claim 13.

Conclusion

The above amendments and remarks are not intended to provide an exhaustive basis for patentability or concede the basis for the rejections in the Office Action, but are simply provided to overcome the rejections made in the Office Action in an expedient fashion.

In view of the above amendments and remarks, it is respectfully submitted that the present application is in condition for allowance and an early notice of allowance is earnestly solicited.

If after reviewing this amendment the Examiner feels that any issues remain which must be resolved before the application can be passed to issue, the Examiner is invited to contact the undersigned representative by telephone to resolve such issues.

Respectfully submitted,

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